

storing a header of said frame of data to a Receiving Frame Descriptor (RFD),

said header comprising at least one sequence number;

zero-copying said payload of said received frame of data to said at least one AM buffer.

2. (Original) The method of Claim 1 further comprising allocating a new AM buffer if at least one available AM buffer is not identified, said allocating comprising creating a Receiving Buffer Descriptor (RBD) within an available RBD queue entry, said RBD comprising a value corresponding to a start address and a value corresponding to a size of said new AM buffer.
3. (Original) The method of Claim 2 wherein said zero-copying is aborted if said at least available RBD queue entry is not identified.
4. (Original) The method of Claim 3 further comprising creating a flow descriptor if said new AM buffer is allocated, said flow descriptor identifying a zero-copy flow.
5. (Original) The method of Claim 2 wherein said identifying comprises searching a pre-defined number of RBD's within said RBD queue for an RBD corresponding to said at least one available AM buffer.
6. (Original) The method of Claim 5 wherein said search is based on a difference between a an AM buffer size and a size of said payload of said frame of data.

7. (Original) The method of Claim 6 wherein said search is aborted if said search is unsuccessful after searching said predefined number of RBD's within said RBD queue.
8. (Original) The method of Claim 7 wherein said RBD queue is indexed by a head pointer, a tail pointer and a Last Completed RBD Number (LCRN) pointer, said head pointer comprising a value corresponding to an address of a next available RBD entry within said RBD queue and said tail pointer comprising a value corresponding to an address of an oldest incomplete RBD within said RBD queue and said LCRN pointer comprising a value corresponding to a full AM buffer.
9. (Original) The method of Claim 8 wherein an RBD entry within said RBD queue corresponding to a full AM buffer is invalidated.
10. (Original) The method of Claim 9 wherein said invalidated RBD entry is used to store future or pending RBD's.

Claims 11-30 (Canceled)